IN THE CLAIMS:

Please cancel claim 11 without prejudice to prosecution in a related application.

Please amend claims 3, 14, and 19 as indicated below.

The pending claims are believed to be as follows:

1-2. (Cancelled)

3. (Currently Amended) An intervertebral disc nucleus pulposus implant, comprising:

a load bearing elastic body sized for placement into an intervertebral disc space, said body having a first end, a second end, a central portion, and a first, folded configuration wherein said first end and said second end are positioned adjacent to said central portion to form at least one inner fold, said elastic body configurable into a second, straightened configuration for insertion through an opening in an intervertebral disc annulus fibrosis, said body configurable back into said first configuration after said insertion; ~~wherein said body provides an implant having a substantially solid center when the body is in its first configuration~~ wherein said implant provides a top, load bearing surface having a substantially solid center portion when said implant is in its first, folded configuration.

4. (Original) The implant of claim 3, wherein said inner fold defines an aperture.

5. (Original) The implant of claim 3, wherein said elastic body is comprised of a hydrogel material.

6. (Original) The implant of claim 3, wherein said elastic body is comprised of an elastomer.

7. (Original) The implant of claim 6, wherein said elastomer is selected from the group consisting of silicone, polyurethane, copolymers of silicone and polyurethane, polyolefins, nitrile and combinations thereof.

8. (Previously Amended) An intervertebral disc nucleus pulposus implant, comprising:

a load bearing elastic body sized for placement into an intervertebral disc space, said body having a first end, a second end, a central portion, and a first configuration wherein said first end and said second end are positioned adjacent to said central portion to form at least one inner fold, said elastic body configurable into a second, straightened configuration for insertion through an opening in an intervertebral disc annulus fibrosis, said body configurable back into said first configuration after said insertion; wherein said inner fold defines an aperture; and wherein said inner fold has a surface with projections, said projections extending into said aperture.

9. (Previously Amended) An intervertebral disc nucleus pulposus implant, comprising:

a load bearing elastic body sized for placement into an intervertebral disc space, said body having a first end, a second end, a central portion, and a first configuration wherein said first end and said second end are positioned adjacent to said central portion to form at least one inner fold, said elastic body configurable into a second, straightened configuration for insertion through an opening in an intervertebral disc annulus fibrosis, said body configurable back into said first configuration after said insertion; wherein said elastic body has an outer surface, said outer surface having

projections extending therefrom, said projections configured for enhancing fixation of said body in said intervertebral disc space.

10. (Original) The implant of claim 3, wherein the outer surface of said elastic body is microtexturized.

11. (Cancelled.)

12. (Previously Amended) An intervertebral disc nucleus pulposus implant, comprising:

a load bearing elastic body sized for placement into an intervertebral disc space, said body having a first end, a second end, a central portion, and a first configuration wherein said first end and said second end are positioned adjacent to said central portion to form at least one inner fold, said elastic body configurable into a second, straightened configuration for insertion through an opening in an intervertebral disc annulus fibrosis, said body configurable back into said first configuration after said insertion; wherein said body further comprises a reinforcing material at said at least one inner fold.

13. (Original) The implant of claim 12, wherein said reinforcing material comprises fibers.

14. (Currently Amended) An intervertebral disc nucleus pulposus implant according to claim 3 ~~, comprising:~~

~~a load bearing elastic body sized for placement into an intervertebral disc space, said body having a first end, a second end, a central portion, and a first configuration wherein said first end and said second end are positioned adjacent to said central portion to form at least one inner fold, said elastic body configurable into a~~

~~second, straightened configuration for insertion through an opening in an intervertebral disc annulus fibrosis, said body configurable back into said first configuration after said insertion~~; wherein said elastic body is comprised of a hydrogel material, said material having at least one growth factor dispersed therein.

15. (Original) The implant of claim 14, wherein said growth factor is selected from the group consisting of transforming growth factor β, bone morphogenetic proteins, fibroblast growth factors, platelet-derived growth factors, insulin-like growth factors and combinations thereof.

16. (Original) The implant of claim 14, wherein said growth factor comprises a recombinant protein.

17. (Previously Amended) An intervertebral disc nucleus pulposus implant, comprising:

a load bearing elastic body sized for placement into an intervertebral disc space, said body having a first end, a second end, a central portion, and a first configuration wherein said first end and said second end are positioned adjacent to said central portion to form at least one inner fold, said elastic body configurable into a second, straightened configuration for insertion through an opening in an intervertebral disc annulus fibrosis, said body configurable back into said first configuration after said insertion; wherein said growth factor comprises a recombinant protein; wherein said recombinant protein is a human protein.

18. (Previously Amended) An intervertebral disc nucleus pulposus implant, comprising:

a load bearing elastic body sized for placement into an intervertebral disc space, said body having a first end, a second end, a central portion, and a first configuration wherein said first end and said second end are positioned adjacent to said central portion to form at least one inner fold, said elastic body configurable into a second, straightened configuration for insertion through an opening in an intervertebral disc annulus fibrosis, said body configurable back into said first configuration after said insertion; wherein said body has at least one surface depression in its second configuration, said inner fold formed from said surface depression.

19. (Currently Amended) An intervertebral disc nucleus pulposus implant according to claim 3 ~~, comprising:~~

~~a load bearing elastic body sized for placement into an intervertebral disc space, said body having a first end, a second end, a central portion, and a first configuration wherein said first end and said second end are positioned adjacent to said central portion to form at least one inner fold, said elastic body configurable into a second, straightened configuration for insertion through an opening in an intervertebral disc annulus fibrosis, said body configurable back into said first configuration after said insertion~~; wherein said first end is formed from a first arm, said second end is formed from a second arm and one of said arms of said implant has a length greater than the other of said arms.

20. (Original) The implant of claim 4, wherein said aperture has a cross-sectional shape selected from the group consisting of annular-shaped, elliptical-shaped, and star-shaped.

21. (Original) The implant of claim 3, wherein said body is substantially elliptical- or ring-shaped in its folded configuration.

22. (Original) The implant of claim 3, wherein said body has a top surface for contacting an upper vertebral endplate of an intervertebral disc and a bottom surface for contacting a lower vertebral end plate of an intervertebral disc, said top and bottom surface configured to be complementary to the endplate they are in contact with.

23. (Original) The implant of claim 22, wherein said top and bottom surface of said body are convex.

24. (Previously Amended) The implant of claim 3, wherein said first end and said second end each have an inner edge and an outer edge, at least one of said edges having a rounded configuration.

25. (Previously Amended) An intervertebral disc nucleus pulposus implant, comprising:

a load bearing elastic body sized for placement into an intervertebral disc space, said body having a first end, a second end, a central portion, and a first configuration wherein said first end and said second end are positioned adjacent to said central portion to form at least one inner fold, said elastic body configurable into a second, straightened configuration for insertion through an opening in an intervertebral disc annulus fibrosis, said body configurable back into said first configuration after said insertion; wherein said body has a top surface for contacting an upper vertebral endplate of an intervertebral disc, a bottom surface for contacting a lower vertebral end plate of an intervertebral disc, and an external side surface, said body having at least one groove on

said side surface, said groove extending between said top surface and said bottom surface.

26-47. (Cancelled)

48. (Previously Added) The implant of claim 3, wherein said inner fold has a surface with projections, said projections extending into said aperture.

49. (Previously Added) The implant of claim 3, wherein said elastic body has an outer surface, said outer surface having projections extending therefrom, said projections configured for enhancing fixation of said body in said intervertebral disc space.

50. (Previously Added) The implant of claim 3, wherein the outer surface of said elastic body is microtexturized; wherein said microtexturizing is performed by a process selected from the group consisting of bead blasting, plasma etching, chemical etching and combinations thereof.

51. (Previously Added) The implant of claim 3, wherein said body further comprises a reinforcing material at said inner fold surface.

52. (Previously Added) The implant of claim 51, wherein said reinforcing material comprises fibers.

53. (Previously Added) The implant of claim 3, wherein said elastic body is comprised of a hydrogel material, said material having at least one growth factor dispersed therein.

54. (Previously Added) The implant of claim 3, wherein said growth factor comprises a human protein.

55. (Previously Added) The implant of claim 3, wherein said body has at least one surface depression in its second configuration, said inner fold formed from said surface depression.

56. (Previously Added) The implant of claim 3, wherein said first end is formed from a first arm, said second end is formed from a second arm and one of said arms of said implant has a length greater than the other of said arms.

57. (Previously Added) The implant of claim 3, wherein said body has a top surface for contacting an upper vertebral endplate of an intervertebral disc, a bottom surface for contacting a lower vertebral end plate of an intervertebral disc, and an external side surface, said body having at least one groove on said side surface, said groove extending between said top surface and said bottom surface.

58. (Previously Added) The implant of claim 3, wherein said load bearing elastic body conforms to and substantially fills the space that is vacated by removal of the disc nucleus pulposus.

59. (Previously Added) The implant of claim 3, wherein said load bearing elastic body further includes metal beads or wires embedded therein to facilitate x-ray identification.

60. (Previously Added) The implant of claim 3, wherein said load bearing elastic body further includes at least one pharmacological agent.

61. (Previously Added) The implant of claim 59 wherein said pharmacological agent is a member selected from the group consisting of antibiotics, analgesics, anti-inflammatories, steroids, and combinations thereof.

62. (Previously Added) The implant of claim 59, wherein said pharamcological agent is chemically attached to the surface of the implant.

63. (Previously Added) The implant of claim 5 wherein said hydrogel is a member selected from the group consisting of natural hydrogels, hydrogels formed from polyvinyl alcohol, acrylamides, polyacrylic acid, poly(acrylonitrile-acrylic acid), polyurethanes, polyethylene glycol, poly(N-vinyl-2-pyrrolidone), acrylates, poly(2-hydroxy ethyl methacrylate), copolymers of acrylates with N-vinyl pyrrolidone, N-vinyl lactams, acrylamide, polyurethanes and polyacrylonitrile.

64. (Previously Added) The implant of claim 62 wherein said hydrogel is cross-linked to provide further strength to the implant.

65. (Previously Added) The implant of claim 3, wherein said load bearing elastic body comprises a hydrophilic polymer.

66. (Previously Added) The implant of claim 3, wherein said load bearing elastic body comprises a member selected from the group consisting of silicone, polyurethane, copolymers of silicone and polyurethane, polyolefins, neoprene, nitrile, vulcanized rubber and combinations thereof.

67. (Previously Amended) The implant of claim 66 wherein said polyurethane is a member selected from the group consisting of thermoplastic polyurethanes, aliphatic polyurethanes, segmented polyurethanes, hydrophilic polyurethanes, polyether-urethane, polycarbonate-urethane and silicone polyether-urethane.

68. (Previously Added) The implant of claim 3, wherein said load bearing elastic body comprises a member selected from the group consisting of glucomannan gel,

hyaluronic acid, polysaccharides, cross-linked carboxyl-containing polysaccharides, and combinations thereof.

69. (Previously Added) The implant of claim 24 wherein said rounded edge may be an inner edge or an outer edge.

70. (Previously Added) An intervertebral disc nucleus pulposus implant comprising a load bearing body sized for placement into an intervertebral disc space, said body having a first end, a second end, and a central portion; wherein said body assumes a first, folded configuration in which said first end and said second end are positioned adjacent to said central portion to provide an implant having a substantially solid center when the implant is not subjected to straightening forces, and wherein said body assumes a second, straightened configuration in which said central portion is between said first end and said second end to provide an implant having a substantially linear shape when said body is subjected to straightening forces; wherein said first end and said second end are each approximately one half the length of said central portion so that the first end and the second end abut near the middle of said central portion when the body assumes its first, folded configuration; and wherein said body includes a plurality of grooves to prevent cracking or tearing of the implant when the implant is manipulated to its straightened configuration.